

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 3
(Ogden)
September 2023

BOUNDARY DESCRIPTION

Box Elder, Cache, Morgan and Weber counties - Boundary begins at US-91 and SR-101 west of Hyrum; east on SR-101 to Hardware Ranch and USFS Road 054 (Ant Flat Road); south on this road to SR-39; southwest on SR-39 to SR-167 (Trappers Loop Road); south on SR-167 to I-84 (Exit 92); west on I-84 to I-15; north on I-15 to US-91; northeast on US-91 to SR-101 west of Hyrum.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP*

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	--	19,859	10%	12,011	9%
Bureau of Land Management	0	--	0	0%	76	<1%
Utah State Institutional Trust Lands	0	--	8,216	5%	0	0%
Native American Trust Lands	0	--	0	0%	0	0%
Private	0	--	139,478	70%	112,589	80%
Department of Defense	0	--	0	0%	5	<1%
USFWS Refuge	0	--	0	0%	0	0%
National Parks	0	--	0	0%	0	0%
Utah State Parks	0	--	0	0%	20	<1%
Utah Division of Wildlife Resources	0	--	30,516	15%	15,206	11%
TOTAL	0	--	198,069	100%	139,907	100%

UNIT MANAGEMENT GOALS

- Manage for a healthy population of animals capable of providing a broad range of recreational opportunities, including hunting and viewing.
- Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies.
- Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size – Maintain a target population size of 11,000 wintering deer. This population objective remains for both the short-term (5-year life of this plan) and long term, barring significant changes in range conditions.

Unit 3

2013-2018 Objective: 11,000

2018-2023 Objective: 11,000

2023-2028 Objective: 11,000

Change from last plan: No change

Herd Composition – Manage for a postseason buck:doe ratio of 18-20:100 in accordance with the statewide plan.

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - Winter population size will be estimated using an analytical model which incorporates harvest data, postseason and spring classifications, and radio-collar based survival estimates. Over winter mortality estimates will be determined using radio-collar data from nearby units and observations of mortality, and changes in ratios from classification data.

Buck:Doer Ratios – Postseason classification will be conducted to monitor buck/doer ratios.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives for buck:doer ratios. Antlerless harvest will be achieved, as needed, using a variety of methods and seasons to maintain a wintering population within objective and to address depredation conflicts.

Limiting Factors (May prevent achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained at lower levels due to conflicts with crop production and private landscapes.

Habitat – Winter range condition is the major limiting factor on the Ogden unit. Range condition is currently poor due to past fires, and competition from introduced weedy species. Excessive habitat utilization will be addressed by antlerless harvests.

Predation – Predators will be managed under the DWR Managing Predatory Species Policy (W1AG-4). Coyote removal through a bounty system is currently underway and future fawn:doer ratios will be used to determine if the removal was effective. This management strategy will be reevaluated in comparison to deer population metrics to determine if the Predator Management Plan strategy is still required. Cougar harvest will be managed according to 2023 Utah House Bill 469.

Highway Mortality - Cooperate with the Utah Dept. of Transportation in construction of highway fences, passage structures and warning signs. A significant number of highway mortalities may tend to reduce deer populations in the following areas: Wellsville Canyon, Highway 89 from Brigham City to Pleasant View, Highway 39 (Monte Cristo), and Highway 167 (Trapper's Loop).

Illegal Take - Illegal take is not currently a significant source of mortality. Should illegal kill become an identified and significant source of mortality, an Action Plan will be developed in coordination with the Law Enforcement Section to develop specific preventive measures.

Disease - The impact that disease has on mule deer populations varies widely and can be challenging to assess. Diseases that may be found on the unit include bluetongue, epizootic hemorrhagic disease (EHD), and pneumonia. Chronic Wasting disease is of further concern although it has not yet been detected on the unit. Surveillance will continue to be implemented by testing hunter harvested animals as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has led to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The Ogden Management Unit is located within Weber, Cache, Box Elder, and Morgan counties. Municipalities located within or along the unit boundaries include: Hyrum, Wellsville, Mantua, Perry, Willard, Ogden, Mountain Green, and Huntsville. The major drainages are the Little Bear River, Ogden River and Box Elder Creek. Smaller drainages are Davenport Creek, Paradise Dry Canyon, Hyrum Dry Canyon, Hyrum Green Canyon, Perry Canyon, and Willard Canyon. The topography is steep and rough on the western face of the Wasatch Mountains above Willard, Perry, Ogden, east of Avon and Paradise, and more gentle in-between.

Elevation ranges from 4,400 feet near Willard to 9,764 feet on Willard Peak with approximately 139,907 acres of deer winter range and 198,069 acres of summer range in the unit. Most winter (80%) and summer range habitats (70%) are on private land. The U.S. Forest Service administers 10% of the summer range and 9% of the winter range. The Division of Wildlife Resources maintains 15% of the deer summer range and 11% of the winter range on the unit. Major deer wintering areas are found between 4,600 feet and 7,000 feet on the Wasatch face above Willard and Perry; between 5,100 to 7,000 feet north and east of Mantua Reservoir; from 5,600 to 7,000 feet in Threemile Canyon; and between 5,400 and 7,000 feet along the slopes on the southeast side of Cache Valley above Paradise and Avon. During severe winters, snow restricts deer use to Threemile Canyon, the East Fork of the Little Bear River, the area south of Porcupine Reservoir, Paradise Dry Canyon, Hyrum Dry Canyon, Perry Canyon, and the southeast corner of the unit south of Willard (King and Muir 1971). In addition, deer winter regularly in the Middle Fork and South Fork drainages of Ogden Valley, and on foothills from Brigham Face to Weber Canyon.

Habitat Concerns

Mule deer habitat on the Ogden Unit is fairly abruptly divided between summer range and winter range. The summer range is mostly at higher elevations. Summer range habitat concerns are mainly the loss of aspen stands due to conifer encroachment and the continued expansion and development of summer home and subdivisions in the Monte Cristo, Ant Flat and Powder Mountain areas.

Low elevation winter range is the major limiting factor for mule deer populations on the Ogden Unit. The winter range areas are also those areas that are most at risk to vegetative changes and development. The largest threat to mule deer habitat in the Ogden Valley areas is the direct loss of crucial winter range acres due to development and urbanization. Most of the increase in home building is occurring on the foothills in what was historic deer winter range.

Additional threats and losses to deer winter range is the reduction in habitat quality due to the loss of critical browse species (sagebrush, bitterbrush, etc.). This loss has been attributed to fire, agriculture, drought, etc. However, the abundance of weedy annual grass species, and the increase of the exotic, weedy, perennial grass, and bulbous bluegrass are also a likely causes of sagebrush decline. These species form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. Annual grasses, such as cheatgrass, increase fuel loads and the chance of a catastrophic fire event.

Mule deer winter range habitat has decreased in sagebrush density. Causes of sagebrush decline are varied and multiple causes may have compounded effects on the low potential studies in this unit. Moderate drought in recent years has stressed plants, and negatively impacted them. Sagebrush age structure across the area is generally old and one age class. The lack of regeneration of the stand through establishment of young sagebrush is a concern. Annual grass species are present but not prevalent through most of the areas. However, range trend monitoring indicates increases of weedy species such as cheatgrass and bulbous bluegrass in many of the low potential studies in this unit. Perennial grass and forb species have increased on many of the studies as browse species decline, and may compete with browse establishment.

Habitat Management

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat in the Ogden unit. The loss of sagebrush and other browse species on the remaining winter range is important when considering habitat quality. Contributing factors to the loss of browse species such as the impact of the increase in weedy species, particularly annual grasses, lack of browse regeneration and other variables are all of a concern in the habitat management of the Ogden Unit.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners efforts are being made to identify and prioritize critical habitat areas. Conservation easements will be an important part of this effort. Other conservation efforts are ongoing throughout the unit.

To address habitat quality and degradation, habitat improvement projects have been and will continue to be planned throughout the unit. Habitat projects have been and are being done on DWR Wildlife Management Areas, and private lands throughout the unit. The habitat projects are designed to address the specific issues within each project area. Past projects have included annual grass control and shrub plantings on the Middle Fork and Brigham Face WMA's. Other areas targeted for habitat projects within the unit over the next four to five years include Cinnamon Creek WMA winter range rehabilitation and enhancement through scalping and hand planting browse species.

PERMANENT RANGE TREND SUMMARIES

Purpose of Range Trend Studies

The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas. Most permanent range trend sites are located on deer and elk winter ranges. Range trend data are used for habitat improvement planning purposes.

Objective

Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits

Range trend studies are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of 2021 Ogden Range Trend Results

Range Trend studies have been sampled within WMU 3 on a regular basis since 1984, with studies being added or suspended as was deemed necessary. Due to changes in sampling methodologies, only data collected following the 1992 sample year is included in this summary. Monitoring studies of WRI projects began in 2004, when possible. WRI monitoring studies are established prior to treatment and sampled on a regular basis following treatment. Due to the long-term nature of the studies, many of the Range Trend and WRI studies have had some sort of disturbance or treatment prior to or since study establishment.

Deer Winter Range Condition Assessment

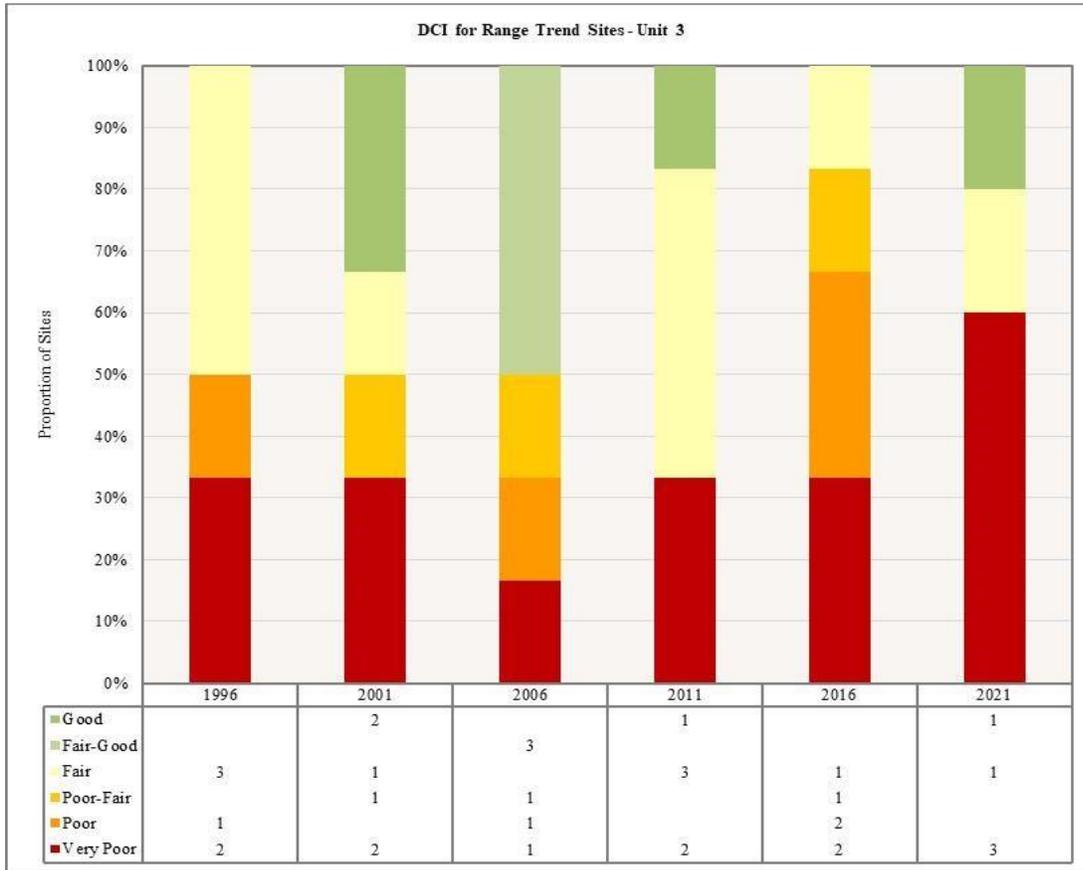
The condition of deer winter range within the Ogden management unit has generally remained poor condition since the 1996 sampling. The Range Trend sites in WMU 3 that have generally remained in fair condition are Clay Valley (03-3), Anderson Ranch (03-4), and Middle Fork (03-17), and are the main drivers for the unit's stability as fair to good deer winter range. Geertsen Canyon (03-18) has a proclivity to remain as very poor deer winter range while NE Mantua Reservoir (03-2) and Threemile Canyon (03-12) tend to also remain in very poor condition but with more variability as fair deer winter range: this variability may be an indicator that improvements in habitat can be made through rehabilitation.

The overall deer winter range assessment in 2021 for WMU 4 was that sites were in poor-fair condition. However, Heiner's Creek (04-1) and Claypit North Slope (04R-3) were considered to be in good condition due to an abundance of perennial grasses, forbs, and preferred browse cover. Deseret Burn, Owen's Canyon, and Tank Canyon rated as very poor to poor winter range in 2021.

The desirable components index (DCI) for deer was created by Range Trend Program personnel as a tool to address condition and/or value of winter ranges for mule deer. This index is meant to be a companion to, and not a replacement for, the site-specific range trend assessments that are found in the annual Utah Big Game Range Trend Studies report. This index was designed to score mule deer winter range based upon several important vegetation components (i.e. preferred browse cover, shrub decadence, recruitment of young shrubs, cover of perennial grasses, cover of perennial forbs, cover of annual grasses, and presence of noxious weeds). Although the index may be useful for assessing habitat for other species (i.e. sage grouse and elk), the rating system was devised to specifically address mule deer winter range requirements

This index is used primarily to determine whether a particular site has the vegetation components necessary to be good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take soil stability, hydrologic function, and other environmental factors into account, this index should not be used to assess a sites function and/or condition.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU 3, Ogden



More detailed information regarding Range Trend data, results, trends, tables and summaries can be found at the Utah's Big Game Range trend Studies web site at <https://wildlife.utah.gov/range-trend.html>

Current Population Status

Year	Buck Harvest	Post-Season F:100 D	Post-Season Buck:100 D	Post-Season Population	Population Objective	% of Objective
2017	647	63	16	8,700	11,000	79%
2018	833	60	20	8,300	11,000	75%
2019	539	63	16	8,800	11,000	80%
2020	569	71	19	8,600	11,000	78%
2021	799	66	23	9,900	11,000	90%

DURATION AND AUTHORITY OF PLAN

This unit management plan was approved by the Division Director in Sept. 2023 and will be in effect for five years, or until amended. Unit deer plan goals, objectives and strategies are constrained within the sideboards set in the statewide deer plan, which supersedes unit plans. It is possible that changes to the statewide deer plan may affect unit plans. Additionally, changes to Utah State Code and/or Administrative Rules may also affect deer unit plans.